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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,241	09/09/2003	Christer Ullberg	19200-000020/US	4057

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EXAMINER	
KIKNADZE, IRAKLI	

ART UNIT	PAPER NUMBER
2882	

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/657,241	ULLBERG, CHRISTER	
	Examiner	Art Unit	
	Irakli Kiknadze	2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/9/03;4/23/04;*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *IDS filed 8/23/04*.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 5-8 and 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Bruder et al. (US Patent Application Publication 2003/00724129 A1).

With respect to claims 1 and 8, Bruder teaches (Fig.2) a scanning-based apparatus of an object comprising: for obtaining data a divergent radiation source (2) emitting radiation centered around an axis of symmetry; a radiation detector (5) comprising a stack of line detectors (4), each being directed towards the divergent radiation source (2) to allow a ray bundle of the radiation that propagates in a respective one of a plurality of different angles to enter the line detector (4); an object area arranged in the radiation path between the divergent radiation source (2) and the radiation detector (5) for housing the object; and a device (22) for moving the divergent radiation source and the radiation detector relative the object while each of the line detectors is adapted to record a plurality of line images of radiation as transmitted through the object in a respective one of the plurality of different angles (paragraph

[0059]). Bruder teaches moving the radiation source (2) and the detector (5) relative the object essentially linearly in a direction essentially orthogonal to the axis of symmetry with a support mechanism (9) displaceable parallel to the system axis Z (paragraph [0064]).

With respect to claims 5-7, Bruder teaches the number of line detectors in the stack of line detectors is at least 3-10 (paragraph [0059] lines 9-12).

With respect to claim 12, Bruder teaches a collimator (as a radiation diaphragm (3) arranged in the radiation path between the radiation source (2) and the object area, the collimator (3) preventing radiation, which is not directed towards the line detectors (4), from impinging on the object, thereby reducing the radiation dose to the object (paragraph [0060], lines 1-14).

With respect to claims 13 and 14, Bruder teaches scanning-based method for obtaining data of an object using a divergent radiation source (2), which emits radiation centered around an axis of symmetry; and a radiation detector (5) comprising a stack of line detectors (4), each being directed towards the divergent radiation source (2) to allow a ray bundle of the radiation that propagates in a respective one of a plurality of different angles to enter the line detector (4), the scanning-based method comprising the steps of: arranging the object in the radiation path between the divergent radiation source (2) and the radiation detector (5); and moving the divergent radiation source (2) and the radiation detector (5) relative the object while, by each of the line detectors (4), recording a plurality of line images of radiation as transmitted through the object in a respective one of the plurality of different angles (paragraph [0059]). Bruder teaches

moving the radiation source (2) and the detector (5) relative the object essentially linearly in a direction essentially orthogonal to the axis of symmetry with a support mechanism (9) displaceable parallel to the system axis Z (paragraph [0064]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims ~~1-14~~ 2-4 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruder et al. (US Patent Application Publication 2003/00724129 A1).

With respect to claims 2-4, Bruder teaches the claimed invention (Fig.2; paragraph [0059]) except for specifying the plurality of different angles distributed over the particular angular range. It would have been obvious to one of ordinary skill in art at the time the invention was made to using the plurality of different angles distributed over the angular range of at least 5°-15°, since it has been held that where the general conditions of claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in art.

With respect to claims 9-11, Bruder teaches the claimed invention (Fig.2; paragraph [0059]) except for specifying type of the plurality the line detectors. However, detectors including a gaseous-based ionization detector, a diode array, a scintillator-

based array, a CCD array, a TFT or CMOS-based detector, or a liquid detector are recognized as suitable X-ray image detectors. Hence, absent any showing of criticality, the selection of one type of detector over the other is considered to be an obvious matter of design based one the availability of the specific detector.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irakli Kiknadze whose telephone number is 571-272-2493. The examiner can normally be reached on 9:00- 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571-272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Irakli Kiknadze
November 1, 2004
IK

EDWARD J. GLICK
SUPERVISORY PATENT EXAMINER